



Fw: TP Compliance Schedule in the Domtar Permit

George Azevedo to: Kevin Pierard, Stephen Jann, Patrick Kuefler

12/12/2012 11:25 AM

Hi All,

I asked Mike Hammers to send me a revised permit from WDNR for the Domtar before placing it on public notice. Note that I did not participate in the discussion to develop a revised compliance schedule language with WDNR. I am providing you my comments below.

The interim and WQBEL for phosphorus is located in the table with limits, 3.2.5, and described in section 3.2.5.4. The phosphorus WQBEL will be 0.63mg/l monthly, from the current and future interim limit of 1mg/l. It is possible, that the facility may be currently averaging 0.7mg/l phosphorus.

The permit retains the 7 year schedule of compliance.

The compliance schedule for total phosphorus is described in section 6.4. Language for watershed activities, and a variance request to meet the phosphorus WQBEL have been removed from the schedule and placed into a new section in the permit.

WDNR has added section 6.4.2 to provide trading, adaptive management, and variance request options. The first paragraph provides for these alternative methods by requesting it in the 3rd year of the schedule, see the "*Final Compliance Alternatives Plan -12/31/2016*." The 2nd paragraph provides for the permittee to continue an adaptive management program by requesting it in the next permit reissuance.

Thank you, George.

----- Forwarded by George Azevedo/R5/USEPA/US on 12/12/2012 11:03 AM -----

From: "Hammers, Mike - DNR" <Mike.Hammers@Wisconsin.gov>
To: George Azevedo/R5/USEPA/US@EPA,
Date: 12/11/2012 10:43 AM
Subject: TP Compliance Schedule in the Domtar Permit

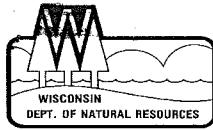
Now that an agreement between Region 5 and the Department has been reached on the content of compliance schedules for phosphorus WQBELs, I have incorporated the agreed upon compliance schedule into the Domtar (WI-0003620-7) permit reissuance. I have attached a copy of the permit at your request. I hope to reissue the permit before the holidays. Unless you indicate otherwise, it is not my intent to wait for EPA approval before reissuing the permit.

 *Mike Hammers*

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0003620-7 Final.doc



WPDES PERMIT

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

Domtar A.W. LLC

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from the following facilities:

Nekoosa Mill
301 Point Basse Ave., Nekoosa, Wisconsin
Wastewater Reclamation Center
405 Church Avenue, Nekoosa Wisconsin
NW 1/4 of Section 2, Town of Saratoga

to the Wisconsin River, groundwaters in Wood County, and land application sites in Adams, Juneau, Portage, Waushara and Wood Counties in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

State of Wisconsin Department of Natural Resources
For the Secretary

By _____
Susan L. Sylvester
Director, Bureau of Water Quality

Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE -- January 1, 2013 EXPIRATION DATE -- December 31, 2017

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1 Surface Water Intake Requirements

1.1 Surface Water Intakes

Intake Number	Surface Water Intake Description and Location
701	Intake number 701 represents the Nepco Lake pumping station's intake.
702	Intake number 702 represents the Nekoosa mill's Wisconsin River intake.

1.2 Intake Structure Evaluation

Based on the Department's review of available information regarding the location, design, operation, and capacity of the intake structures, and a lack of any known adverse environmental impacts caused or contributed to by the structure, the Department believes that Intakes 701 and 702 meet the requirements of s. 283.31(6), Wis. Stats. The permittee shall at all times properly operate and maintain all intake equipment and give advance notice to the Department of any planned changes in the location, design, operation, or capacity of the intake structure from the point at which water is withdrawn from the surface water source up to and including the intake pumps. The permittee shall also inform the Department of any plans for the Nepco Lake pumping station to provide water to the Port Edwards mill.

1.3 Intake Screen Discharges and Removed Substances

Floating debris and accumulated trash collected at Intakes 701 and 702 shall be removed and disposed in a manner to prevent any pollutant from the material from entering the waters of the State pursuant to s. NR 205.07(3)(a), Wis. Adm. Code. The permittee may discharge backwash from intake screens when the backwash is treated to remove debris and trash.

2 In-Plant Requirements

2.1 Sampling Points

Sampling Point Designation	
Sampling Point No.	Sampling Point Location, Waste Type and Sample Contents (as applicable)
101	At in-plant Sampling Point 101 (NK BLEACH PLANT D1), overflow from the first stage chlorine dioxide washer seal box (D1) in the Nekoosa mill's pulp bleach plant shall be sampled prior to combining with overflow from either the enhanced caustic washer seal box (EOP) or the second stage chlorine dioxide washer seal box (D2).
102	At in-plant Sampling Point 102 (NK BLEACH PLANT EOP), overflow from the EOP stage in the Nekoosa mill's pulp bleach plant shall be sampled prior to combining with overflow from either the D1 or D2 stages.
103	At in-plant Sampling Point 103 (NK BLEACH PLANT D2), overflow from the D2 stage in the Nekoosa mill's pulp bleach plant shall be sampled prior to combining with overflow from either the D1 or EOP stages.
104	At in-plant Sampling Point 104 (NK D1, EOP and D2 COMBINED), overflow from the Nekoosa mill's D1, EOP and D2 bleach stages shall be sampled after mixing, but prior to combining with other waste streams from the Nekoosa mill's chlorine dioxide plant and tall oil plant.
106	At in-plant Sampling Point 106 (NK MAIN COLLECTION TANK), process wastewaters from the Nekoosa mill shall be sampled after mixing at the mill's main collection tank, but prior to discharge to the Wastewater Reclamation Center.
109	Field blank to accompany mercury monitoring at the Wastewater Reclamation Center

2.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

2.2.1 Sampling Points (In-plant) 101 - NK BLEACH PLANT D1, 102 - NK BLEACH PLANT EOP and 103 - NK BLEACH PLANT D2

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Weekly	Estimated	See 2.2.1.2
Chloroform		mg/L	Weekly	Grab Comp	See 2.2.1.2 and 2.2.1.1

2

2.2.1.1 Sample Type for Chloroform

A separate grab-composite sample for chloroform is required at Sampling Points 101 (NK BLEACH PLANT D1), 102 (NK BLEACH PLANT EOP), and 103 (NK BLEACH PLANT D2). The three grab-composite samples shall be collected during the same 24-hour period and analyzed separately.

For each bleach stage, a sample type of grab composite means a composite sample made up of at least three equal-volume grab samples. The permittee shall collect the grab samples at approximately equal time intervals over a 24-hour period with at least one grab sample being collected during each 8-hour shift. While grab samples may be composited prior to being analyzed for chloroform, they must be composited at the laboratory where the analysis is performed.

2.2.1.2 Alternative Chloroform Monitoring Method

- The permittee is not required to monitor flow rate or chloroform at Sampling Points 101, 102 and 103 if the permittee maintains a record of the maximum value for each of the following process and operating conditions for the fiber line that was recorded during the collection of each of the samples used to make the compliance demonstration required under 40 CFR 430.02 (f)(2)(i):

- pH of the first chlorine dioxide bleaching stage;
- chlorine (Cl_2) content of the chlorine dioxide (ClO_2) used on the bleach line;
- kappa factor of the first chlorine dioxide bleaching stage; and
- total bleach line chlorine dioxide application rate.

Should the permittee change process and operating conditions on the fiber line so that one or more exceeds the maximum value recorded during the compliance demonstration required under 40 CFR 430.02 (f)(2)(i), the permittee must comply with 40 CFR 430.02 (f)(3) if the permittee wishes to continue the exemption from chloroform monitoring.

As used above, the "compliance demonstration" represents the period from January 1, 2001 through March 31, 2003 when pH, chlorine content and total chlorine dioxide application data were collected and the period from February 21, 2001 through March 31, 2003 when chloroform data were collected. "Kappa factor," "total bleach line chlorine dioxide application rate," and "chlorine-containing compounds" have the meanings specified in 40 CFR 430.02 (f)(7).

2.2.2 Sampling Point 104 - NK D1, EOP and D2 COMBINED

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Total Daily	
Dioxin, 2,3,7,8-TCDD	Daily Max.	<10 pg/L	Quarterly	24-Hr Comp	
Furan, 2,3,7,8-TCDF	Daily Max.	31.9 pg/L	Quarterly	24-Hr Comp	
Chloroform	Daily Max.	6.7 lbs/day	Weekly	Calculated	See 2.2.2.5
Chloroform	Monthly Avg.	4.01 lbs/day	Weekly	Calculated	See 2.2.2.5
Trichlorosyringol	Daily Max.	<2.5 µg/L	Quarterly	24-Hr Comp	
3,4,5-Trichlorocatechol	Daily Max.	<5.0 µg/L	Quarterly	24-Hr Comp	

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Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
3,4,6-Trichlorocatechol	Daily Max.	<5.0 µg/L	Quarterly	24-Hr Comp	
3,4,5-Trichloroguaiacol	Daily Max.	<2.5 µg/L	Quarterly	24-Hr Comp	
3,4,6-Trichloroguaiacol	Daily Max.	<2.5 µg/L	Quarterly	24-Hr Comp	
4,5,6-Trichloroguaiacol	Daily Max.	<2.5 µg/L	Quarterly	24-Hr Comp	
2,4,5-Trichlorophenol	Daily Max.	<2.5 µg/L	Quarterly	24-Hr Comp	
2,4,6-Trichlorophenol	Daily Max.	<2.5 µg/L	Quarterly	24-Hr Comp	
Tetrachlorocatechol	Daily Max.	<5.0 µg/L	Quarterly	24-Hr Comp	
Tetrachloroguaiacol	Daily Max.	<5.0 µg/L	Quarterly	24-Hr Comp	
2,3,4,6-Tetrachlorophenol	Daily Max.	<2.5 µg/L	Quarterly	24-Hr Comp	
Pentachlorophenol	Daily Max.	<5.0 µg/L	Quarterly	24-Hr Comp	

2.2.2.1 Analytical Test Methods

The permittee shall use Method 1613 for TCDD and TCDF and Method 1653 for the chlorinated phenolic compounds listed in the table above. Alternate methods may be used if they are approved by EPA for use with wastewater effluents and provide a minimum level equal to or less than the effluent limit of the parameter being tested.

2.2.2.2 Determination of Compliance

Detectable effluent concentrations equal to or greater than the effluent limit and non-detectable effluent concentrations at limits of detection greater than the effluent limit do not comply with an effluent limit that is expressed as a less-than value. For example, monitoring results of 10 pg/L, 11 pg/L and <11 pg/L do not comply with the 2,3,7,8-TCDD daily maximum effluent limit of <10 pg/L.

2.2.2.3 Sample Type for Dioxin, Furan and the Chlorinated Phenolics

The sample type of 24-hour composite for dioxin, furan and the chlorinated phenolics may be either time-proportional or flow-proportional.

2.2.2.4 Sample Type for Chloroform

A calculated sample type for chloroform means the sum of test results for Sampling Points 101 (NK BLEACH PLANT D1), 102 (NK BLEACH PLANT EOP) and 103 (NK BLEACH PLANT D2) when the results are expressed in units of pounds per day.

2.2.2.5 Alternative Method for Demonstrating Compliance with Chloroform Limits

The permittee may demonstrate compliance with the monthly average chloroform limit of 4.01 lbs/day by utilizing the alternative monitoring method specified by footnote 2.2.1.2 and certifying each month that:

The chlorine-containing compound used for bleaching is unchanged from that used during the compliance demonstration, and the pH of the first chlorine dioxide bleaching stage, the chlorine (Cl_2) content of the chlorine dioxide (ClO_2) used on the

bleach line, the kappa factor of the first chlorine dioxide bleaching stage, and the total bleach line chlorine dioxide application rate during the reporting period did not exceed the maximum value recorded for each such condition during the collection of samples used to make the compliance demonstration.

The permittee shall include the above certification statement as a facility comment on monthly electronic discharge monitoring report forms.

2.2.3 Sampling Point (In-plant) 109 - WRC MERCURY FIELD BLANK

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury, Total Recoverable		ng/L	Monthly	Blank	

2.2.3.1 Total Recoverable Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wis. Adm. Code. The limit of quantitation (LOQ) shall be less than 1.3 ng/L unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each day that mercury samples are collected at the Wastewater Reclamation Center. The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

2.3 Best Management Practices for Spent Pulping Liquor, Soap and Turpentine Management, Spill Prevention and Control

The permittee shall implement Best Management Practices (BMPs) as specified in 40 CFR 430.03 for direct discharging mills. Best Management Practices for spent liquor, soap and turpentine management, spill prevention and control include, but are not limited to, the following.

2.3.1 Requirement to Implement Best Management Practices

The permittee shall implement the following BMPs:

- The permittee shall return spilled or diverted spent pulping liquors, soap and turpentine to the process to the maximum extent practicable as determined by the mill, recover such materials outside the process, or discharge spilled or diverted material at a rate that does not disrupt the receiving wastewater treatment system.
- The permittee shall implement a program to identify and repair leaking equipment items. This program shall include:
 - Regular visual inspections (e.g., once per day) of process areas with equipment items in spent pulping liquor, soap and turpentine service;
 - Immediate repairs of leaking equipment items, when possible. Leaking equipment items that cannot be repaired during normal operations shall be identified, temporary means for mitigating the leaks shall be provided, and the leaking equipment items repaired during the next maintenance outage;
 - Identification of conditions under which production will be curtailed or halted to repair leaking equipment items or to prevent pulping liquor, soap and turpentine leaks and spills; and
 - A means for tracking repairs over time to identify those equipment items where upgrade or replacement may be warranted based on frequency and severity of leaks, spills or failures.

4.

5.

- The permittee shall operate continuous, automatic monitoring systems that are necessary to detect and control leaks, spills and intentional diversions of spent pulping liquor, soap and turpentine. These monitoring systems should be integrated with the mill process control system.
- The permittee shall implement a program of initial and refresher training of operators, maintenance personnel and other technical and supervisory personnel who have responsibility for operating, maintaining or supervising the operation and maintenance of equipment items in spent pulping liquor, soap and turpentine service. The refresher training shall be conducted at least annually and the training program shall be documented.
- The permittee shall prepare a brief report that evaluates each spill and any intentional diversion of spent pulping liquor, soap and turpentine that is not contained at the immediate process area. The report shall describe the equipment items involved, the circumstances leading to the incident, the effectiveness of the corrective actions taken to contain and recover the spill or intentional diversion, and plans to develop changes to equipment and operating and maintenance practices as necessary to prevent recurrence. Discussion of the reports shall be included as part of the annual refresher training.
- The permittee shall establish a program to review any planned modifications to the pulping and chemical recovery facilities and any construction activities in the pulping and chemical recovery areas before these activities commence. The purpose of such review is to prevent leaks and spills of spent pulping liquor, soap and turpentine during the planned modifications, and to ensure that construction and supervisory personnel are aware of possible liquor diversions and of the requirement to prevent leaks and spills of spent pulping liquors during construction.
- The permittee shall install and maintain secondary containment (i.e., containment constructed of materials impervious to pulping liquors) for spent pulping liquor bulk storage tanks equivalent to the volume of the largest tank plus sufficient freeboard for precipitation. An annual tank integrity testing program, if coupled with other containment or diversion structures, may be substituted for secondary containment for spent pulping liquor bulk storage tanks.
- The permittee shall conduct wastewater monitoring to detect leaks and spills, to track the effectiveness of the BMPs, and to detect trends in spent pulping liquor losses. Such monitoring shall be performed in accordance with section 2.3.7.
- The permittee shall install and maintain secondary containment for turpentine bulk storage tanks.
- The permittee shall install and maintain curbing, a dike or other means of isolating soap and turpentine processing and loading areas from the wastewater treatment facilities.

2.3.2 Requirement for a BMP Plan

The permittee shall implement a BMP plan that specifies the procedures and practices required to meet the requirements of section 2.3.1, the construction necessary to meet those requirements including a schedule for such construction, the monitoring program, including the statistically derived action levels, that will be used to meet the requirements of section 2.3.6, and the period of time that the action levels may be exceeded without triggering the responses specified in section 2.3.7.

The BMP plan shall be based on a detailed engineering review of the pulping and chemical recovery operations, including but not limited to process equipment, storage tanks, pipelines and pumping systems, loading and unloading facilities, and other appurtenant pulping and chemical recovery equipment items in spent pulping liquor, soap and turpentine service, for the purpose of:

- Determining the magnitude and routing of potential leaks, spills and intentional diversions of spent pulping liquors, soap and turpentine during process startups and shutdowns, maintenance, production grade changes, storm or other weather events, power failures, and normal operations.

Action levels developed as specified above shall be revised using at least six months of monitoring data after any change in mill design, construction, operation or maintenance that materially affects the potential for leaks or spills of spent pulping liquor, soap or turpentine from the immediate process areas.

The permittee shall employ the following procedures to revise action levels:

- The permittee shall collect 24-hour composite samples and analyze the samples for a measure of organic content (e.g., chemical oxygen demand (COD) or total organic carbon (TOC)), or a measure related to spent pulping liquor losses measured continuously and averaged over 24 hours (e.g., specific conductivity or color).
- Monitoring shall be conducted at Sampling Point 106, Nekoosa mill main collection tank.

2.3.7 Monitoring, Corrective Action and Reporting Requirements

The permittee shall conduct daily monitoring at Sampling Point 106 in accordance with the procedures described in section 2.3.6 for the purpose of detecting leaks and spills, tracking the effectiveness of the BMPs, and detecting trends in spent pulping liquor losses.

Whenever monitoring results exceed the lower action level for the period of time specified in the BMP plan, the permittee shall conduct an investigation to determine the cause of such exceedance. Whenever monitoring results exceed the upper action level for the period of time specified in the BMP plan, the permittee shall complete corrective action to bring the mass loading below the lower action level as soon as practicable.

Although exceedances of the action levels will not constitute violations of this permit, failure to take the actions required above as soon as practicable will be a permit violation.

By the 15th of February each year, the permittee shall report to the Department the results of the daily monitoring conducted as required above for the previous calendar year. Such reports shall include a summary of the monitoring results, the number and dates of exceedances of the applicable action levels, and brief descriptions of any corrective actions taken to respond to such exceedances.

- Determining whether existing spent pulping liquor containment facilities are of adequate capacity for collection and storage of anticipated intentional liquor diversions with sufficient contingency for collection and containment of spills.
- Considering the need for continuous automatic monitoring systems to detect and control leaks and spills of spent pulping liquor, soap and turpentine; the need for process wastewater diversion facilities to protect end-of-pipe wastewater treatment facilities from adverse effects of spills and diversion of spent pulping liquors, soap and turpentine; the potential for contamination of storm water from the immediate process areas; and the extent to which segregation and/or collection and treatment of contaminated storm water from immediate process areas are appropriate.

2.3.3 Amendment of the BMP Plan

The permittee shall amend its BMP plan whenever there is a change in mill design, construction, operation or maintenance that materially affects the potential for leaks or spills of spent pulping liquor, soap or turpentine from the immediate process areas.

The permittee shall complete a review and evaluation of the BMP plan five years after the first BMP plan is prepared and, except as provided above, once every five years thereafter. As a result of this review and evaluation, the permittee shall amend the BMP plan within three months of the review if the permittee determines that any new or modified management practices and engineering controls are necessary to reduce significantly the likelihood of spent pulping liquor, soap and turpentine leaks, spills or intentional diversions from the immediate process areas. The amended BMP plan shall include a schedule for implementation of such practices and controls.

2.3.4 Review and Certification of the BMP Plan

The BMP plan, and any amendments thereto, shall be reviewed by the senior technical manager at the mill and approved and signed by the mill manager. Any person signing the BMP plan or its amendments shall certify to the Department that the BMP plan or its amendments have been prepared in accordance with good engineering practices and in accordance with 40 CFR 430.03.

2.3.5 Record Keeping Requirements

The permittee shall maintain on the mill premises a complete copy of the current BMP plan and the records specified below and shall make such BMP plan and records available to the Department and the Regional Administrator or his or her designee for review upon request.

The permittee shall maintain the following records for three years from the date they are created:

- Records tracking the repairs performed in accordance with the repair program described in section 2.3.1;
- Records of initial and refresher training conducted in accordance with section 2.3.1;
- Reports of uncontained spills and intentional diversions of spent pulping liquor, soap and turpentine prepared in accordance section 2.3.1; and
- Records of monitoring required by sections 2.3.1. and 2.3.7.

2.3.6 Action Levels

The permittee shall implement action levels that will trigger requirements to initiate investigations on BMP effectiveness and to take corrective action. An action level is a statistically determined pollutant loading determined by a statistical analysis of at least six months of daily measurements. The action levels shall consist of a lower action level, which if exceeded will trigger the investigation requirements described in section 2.3.7, and an upper action level, which if exceeded will trigger the corrective action requirements described in section 2.3.7.

3 Surface Water Requirements

3.1 Sampling Points

The discharges shall be limited to the waste types designated for the listed sampling points.

Sampling Point Designation	
Sampling Point No.	Sampling Point Location, Waste Type and Sample Contents (as applicable)
001	At Sampling Point 001 (NK CLO ₂ LIFT STATION OVERFLOW), the Nekoosa mill's chlorine dioxide plant lift station emergency overflow shall be sampled prior to discharge to the Wisconsin River via Outfall 001.
002	At Sampling Point 002, final effluent from the Wastewater Reclamation Center shall be sampled prior to discharge to the Wisconsin River via Outfall 002.
006	At Sampling Point 006, noncontact cooling waters (No. 6 Turbine condenser, chlorine dioxide plant chiller and other sources) shall be sampled after mixing, but prior to discharge to the Wisconsin River via Outfall 006.
008	At Sampling Point 008 (NK COLLECTION TANK OVERFLOW), the Nekoosa mill's main collection tank emergency overflow shall be sampled prior to discharge to the Wisconsin River via Outfall 008.
011	At Sampling Point 011, overflow from the intake water standpipe shall be sampled prior to discharge to the Wisconsin River via Outfall 011.
013	Sampling Point 013 represents the combined loadings from Outfalls 001 (Nekoosa CLO ₂ lift station overflow), 002 (Wastewater Reclamation Center effluent), and 008 (Nekoosa collection tank overflow).

3.2 Monitoring Requirements and Effluent Limitations

The permittee shall comply with the following monitoring requirements and limitations.

3.2.1 Sampling Points 001 - NK CLO₂ LIFT STATION OVERFLOW and 008 - NK COLLECTION TANK OVERFLOW

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Estimated	
BOD ₅ , Total		lbs/day	Daily	Grab Comp	
Suspended Solids, Total		lbs/day	Daily	Grab Comp	
pH Field	Daily Max.	9.0 s.u.	Daily	Grab	
pH Field	Daily Min.	5.0 s.u.	Daily	Grab	

3.2.1.1 Scheduled and Unscheduled Bypassing

The discharge shall comply with Standard Requirements 7.2.2 and 7.2.3 of this permit.

3.2.1.2 Daily Sample Frequency

The discharge shall be sampled daily when discharge occurs.

3.2.1.3 Grab Composite Sample Type

Grab composite sampling means a composite of individual grab samples of equal volume that are collected over the duration of the discharge at approximately equal intervals of time not to exceed one hour.

3.2.2 Sampling Point (Outfall) 002 - WRC EFFLUENT

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD ₅ , Total		lbs/day	5/Week	24-Hr Flow Prop Comp	Sample 5 times per week November through April
BOD ₅ , Total		lbs/day	Daily	24-Hr Flow Prop Comp	Sample daily May through October
Suspended Solids, Total		lbs/day	5/Week	24-Hr Flow Prop Comp	
pH (Minimum)	Daily Min.	5.0 s.u.	Daily	Continuous	
pH (Maximum)	Daily Max.	9.0 s.u.	Daily	Continuous	
AOX		lbs/day	3/Week	24-Hr Flow Prop Comp	
Phosphorus, Total		mg/L	Monthly	24-Hr Flow Prop Comp	
Temperature, Maximum		deg F	Daily	Continuous	
Chlorine, Total Residual		µg/L	Monthly	Grab	
Dioxins and Furans (all seventeen 2,3,7,8-substituted polychlorinated congeners)		pg/L	Annual	Composite	See 3.2.5.5 for a list of the seventeen congeners.
Mercury, Total Recoverable		ng/L	Monthly	Grab	

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3.2.2.6 Chlorine Monitoring

Monitoring for total residual chlorine is required at least monthly. If the permittee adds chlorine, in any form, or any other halogen to its wastewater treatment system on one or more days during a month, the permittee shall make a reasonable effort to monitor for total residual chlorine when the additive is most likely to be present in the treatment system effluent.

3.2.2.7 Dioxins and Furans Test Methods

When testing for dioxin and furan congeners, the permittee shall use EPA Method 1613 or any other method that is approved by EPA and provides a minimum level (ML) of 10 pg/L for 2,3,7,8-TCDD.

3.2.2.8 Composite Sample Type for Dioxins and Furans

When monitoring for dioxin and furan congeners, flow proportional composite samples shall be obtained over a period of time of one to five consecutive days and shall be made up using continuous flow proportional samples or the greater of:

- Twelve nearly equally spaced, flow proportioned grab samples; or
- The total number of grab samples that would be obtained if a minimum of six nearly equally spaced, flow proportional samples are taken on each day of sampling.

3.2.2.9 Mercury Test Method

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wis. Adm. Code. The limit of quantitation (LOQ) shall be less than 1.3 ng/L unless the samples are quantified at levels above 1.3 ng/L.

3.2.2.10 Whole Effluent Toxicity (WET) Testing

Primary Control Water: Wisconsin River.

Instream Waste Concentration: 3.2 percent

Dilution series: At least five effluent concentrations and dual controls must be included in each test.

- Acute: 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- Chronic: 100, 30, 10, 3, 1% and any additional selected by the permittee.

WET Testing Frequency: Tests are required during the following quarters:

- Acute: October through December of 2013, July through September of 2014, April through June of 2015, January through March of 2016, and April through June of 2017.
- Chronic: October through December of 2013, July through September of 2014, April through June of 2015, January through March of 2016, and April through June of 2017.

Reporting: The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The original Discharge Monitoring Report (DMR) form and one copy shall be sent to the contact and location provided on the DMR by the required deadline.

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than 1.0 for either species. The TU_a shall be calculated as follows: If LC₅₀ ≥ 100, then TU_a = 1.0. If LC₅₀ < 100, then TU_a = 100 ÷ LC₅₀. A chronic toxicity test shall be considered positive if the Relative Toxic

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Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Acute WET		TU _a	Annual	24-Hr Flow Prop Comp	WET Testing shall be performed during the calendar quarters specified in 3.2.2.10.
Chronic WET		rTU _c	Annual	24-Hr Flow Prop Comp	

3.2.2.1 BOD₅ Sample Frequency

During the months of May through October each year, BOD₅ monitoring is required daily. During the months of November through April each year, BOD₅ monitoring is required five times per week with the following exception. BOD₅ monitoring at Sampling Point 002 during the months of November through April is required on each day that discharge occurs from Outfall 001 (Nekoosa mill's chlorine dioxide plant lift station emergency overflow), Outfall 008 (Nekoosa mill's main collection tank emergency overflow) or both.

If the permittee exceeds technology-based effluent limits for BOD₅, fails to submit discharge monitoring reports or is subject to formal enforcement action, the Department may modify this permit without public notice to increase the BOD₅ monitoring frequency during the months of November through April.

3.2.2.2 Total Suspended Solids Sample Frequency

If the permittee exceeds technology-based effluent limits for total suspended solids (TSS), fails to submit discharge monitoring reports or is subject to formal enforcement action, the Department may modify this permit without public notice to increase the TSS monitoring frequency.

3.2.2.3 Continuous pH Monitoring

The permittee shall maintain the pH of this discharge within the range of 5.0 to 9.0 standard units (s.u.) except excursions are permitted subject to the following conditions:

- The pH is monitored continuously;
- The total time during which the pH is outside the range of 5.0 to 9.0 s.u. shall not exceed 446 minutes during any calendar month;
- No individual pH excursion outside the range of 5.0 to 9.0 s.u. shall exceed 60 minutes in duration;
- No individual pH excursion shall be outside the range of 4.0 to 11.0 s.u.; and
- On a daily basis, the permittee shall report the minimum and maximum pH, total time that the pH is outside the range of 5.0 to 9.0 s.u., and the number of pH excursions outside the range of 5.0 to 9.0 s.u. that exceed 60 minutes in duration.

3.2.2.4 Adsorbable Organic Halide (AOX) Monitoring

When testing for AOX, the permittee shall use EPA Method 1650 or any other method that are approved by EPA and provides a minimum level (ML) of 20 µg/L for AOX.

3.2.2.5 Temperature Monitoring

For monitoring temperature continuously, discrete measurements shall be recorded at intervals of 15 minutes or less during each 24-hour monitoring period pursuant to s. NR 218.04(13), Wis. Adm. Code. Report the maximum temperature measured during each 24-hour monitoring period on the monthly Discharge Monitoring Report.

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Unit - Chronic (rTU_c) is greater than 1.0 for either species. The rTU_c shall be calculated as follows: If IC₂₅ ≥ IWC, then rTU_c = 1.0. If IC₂₅ < IWC, then rTU_c = IWC ÷ IC₂₅.

Additional Testing Requirements: Within 90 days of a test which showed positive results, the permittee shall submit the results of at least 2 retests to the Biomonitoring Coordinator on "Whole Effluent Toxicity Test Report Forms". The 90 day reporting period shall begin the day after the test which showed a positive result. The retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

3.2.3 Sampling Point (Outfall) 006 - NK CLEAR SEWER NCCW

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
Temperature, Average	Daily Max.	120 deg F	Daily	Continuous	Daily Average temperature effluent limit for all twelve months of the year effective until January 1, 2014.
Temperature, Maximum	Daily Max.	120 deg F	Daily	Continuous	Daily Maximum temperature effluent limit only for the months of January, February, April, May, June, October and November effective beginning January 1, 2014.
Chlorine, Total Residual	Daily Max.	38 µg/L	Monthly	Grab	Effluent limit effective July 1, 2015

3.2.3.1 Maximum Temperature Monitoring

For monitoring temperature continuously, discrete measurements shall be recorded at intervals of 15 minutes or less during each 24-hour monitoring period pursuant to s. NR 218.04(13), Wis. Adm. Code. Report the maximum temperature measured and the calculated average temperature during each 24-hour monitoring period on the monthly Discharge Monitoring Report.

3.2.3.2 Determination of Compliance with Total residual Chlorine Effluent Limit

Compliance with the daily maximum effluent limit for total residual chlorine shall be determined pursuant to s. NR 106.07 (6), Wis. Adm. Code.

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3.2.4 Sampling Point (Outfall) 011 - NEPCO LAKE STANDPIPE OVERFLOW

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Monthly	Estimated	
Chlorine, Total Residual	Daily Max.	38 µg/L	Monthly	Grab	Effluent limit effective July 1, 2015

3.2.4.1 Total Residual Chlorine Sample Location

When sampling for total residual chlorine, the permittee may collect a sample of standpipe water at the Nekoosa mill rather than collect a sample of standpipe overflow.

3.2.4.2 Determination of Compliance with Total Residual Chlorine Effluent Limit

Compliance with the daily maximum effluent limit for total residual chlorine shall be determined pursuant to s. NR 106.07 (6), Wis. Adm. Code.

3.2.5 Sampling Point (Outfall) 013 - 001, 002 and 008 COMBINED

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
BOD ₅ , Total	Daily Max.	12,437 lbs/day	5/Week	Calculated	Sample 5 times per week November through April
BOD ₅ , Total	Monthly Avg.	6,454 lbs/day	5/Week	Calculated	
BOD ₅ , Total	Daily Max.	12,437 lbs/day	Daily	Calculated	Sample daily May through October and see 3.2.5.6
BOD ₅ , Total	Monthly Avg.	6,454 lbs/day	Daily	Calculated	
Suspended Solids, Total	Daily Max.	24,525 lbs/day	5/Week	Calculated	
Suspended Solids, Total	Monthly Avg.	13,179 lbs/day	5/Week	Calculated	
AOX	Daily Max.	921 lbs/day	3/Week	Calculated	
AOX	Monthly Avg.	603 lbs/day	3/Week	Calculated	
Phosphorus, Total	Rolling 12 Month Avg.	1.0 mg/L	Monthly	Calculated	Final WQBELs for total phosphorus equal 0.21 mg/L 6-month average, 27 lbs/day 6-month average, and 0.63 mg/L monthly average (see 3.2.5.4 and 6.4).

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If Adaptive Management or Water Quality Trading is approved as part of the permit application for the next reissuance or as part of an application for a modification or revocation and reissuance, the plan and specification submittal, construction, and final effective dates for compliance with the total phosphorus WQBEL may change in the reissued or modified permit. In addition, the numeric value of the water quality based effluent limit may change based on new information (e.g., a TMDL) or additional data. If a variance is approved for the next reissuance, interim limits and conditions will be imposed in the reissued permit in accordance with s. 283.15, Stats., and applicable regulations. A permittee may apply for a variance to the phosphorus WQBEL at the next reissuance even if the permittee did not apply for a phosphorus variance as part of this permit reissuance.

Note: If a WQBEL has taken effect in a permit, any increase in the limit is subject to s. NR 102.05(1) and ch. NR 207 Wis. Adm. Code. Also, averaging periods for total phosphorus six-month average WQBELs are May through October and November through April.

3.2.5.5 2,3,7,8-TCDD TE

The permittee shall demonstrate compliance with the monthly average effluent limit for 2,3,7,8-TCDD TE by using the 2,3,7,8-TCDD toxicity equivalence concentration and the effluent flow rate. The permittee shall use the following equation to calculate the 2,3,7,8-TCDD toxicity equivalence concentration:

$$(TEC)_{\text{total}} = \sum (C)_x (TEF)_x (BEF)_x$$

where:

(TEC)_{total} = 2,3,7,8-TCDD toxicity equivalence concentration in the effluent;
(C)_x = concentration of congener "x" in the effluent;
(TEF)_x = toxicity equivalency factor for congener "x"; and
(BEF)_x = bioaccumulation equivalency factor for congener "x."

When a congener is not detected, a zero may be used in the above equation for the concentration of the congener.

The following table provides the toxicity and bioaccumulation equivalency factors:

3.2.5.5.1 Toxicity and Bioaccumulation Equivalency Factors

Congener	TEF	BEF
2,3,7,8-TCDD	1.0	1.0
1,2,3,7,8-PeCDD	0.5	0.9
1,2,3,4,7,8-HxCDD	0.1	0.3
1,2,3,6,7,8-HxCDD	0.1	0.1
1,2,3,7,8,9-HxCDD	0.1	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.05
OCDD	0.001	0.01
2,3,7,8-TCDF	0.1	0.8
1,2,3,7,8-PeCDF	0.05	0.2
2,3,4,7,8-PeCDF	0.5	1.6
1,2,3,4,7,8-HxCDF	0.1	0.08
1,2,3,6,7,8-HxCDF	0.1	0.2
1,2,3,7,8,9-HxCDF	0.1	0.6
1,2,3,4,6,7,8-HpCDF	0.1	0.7
1,2,3,4,7,8,9-HpCDF	0.01	0.01
OCDF	0.001	0.02

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Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Dioxin, 2,3,7,8-TCDD	Monthly Avg.	1.2 µg/day	Annual	Calculated	
Dioxin, 2,3,7,8-TCDD TE	Monthly Avg.	11 µg/day	Annual	Calculated	
Mercury, Total Recoverable	Daily Max.	18 ng/L	Monthly	Calculated	

3.2.5.1 Applicability

Effluent limitations specified in the above table are applicable to the combined loadings from Outfalls 001, 002 and 008 as monitored at Sampling Points 001, 002 and 008. The table's monitoring requirements refer to the calculation of combined loads. Sampling requirements for BOD₅, TSS, AOX, phosphorus, 2,3,7,8-TCDD, dioxin and furan congeners that are necessary to calculate total dioxin equivalents, and mercury are specified elsewhere in this permit.

3.2.5.2 BOD₅ Sample Frequency

During the months of May through October each year, BOD₅ monitoring is required daily. During the months of November through April each year, BOD₅ monitoring is required five times per week with the following exception. BOD₅ monitoring at Sampling Point 002 (Wastewater Reclamation Center effluent) during the months of November through April is required on each day that discharge occurs from Outfall 001 (Nekoosa mill's chlorine dioxide plant lift station emergency overflow), Outfall 008 (Nekoosa mill's main collection tank emergency overflow) or both.

If the permittee exceeds technology-based effluent limits for BOD₅, fails to submit discharge monitoring reports or is subject to formal enforcement action, the Department may modify this permit without public notice to increase the BOD₅ monitoring frequency during the months of November through April.

3.2.5.3 Total Suspended Solids Sample Frequency

If the permittee exceeds technology-based effluent limits for total suspended solids (TSS), fails to submit discharge monitoring reports or is subject to formal enforcement action, the Department may modify this permit without public notice to increase the TSS monitoring frequency.

3.2.5.4 Phosphorus Water Quality Based Effluent Limitations (WQBELs)

Final WQBELs for total phosphorus, which become effective according to Schedule of Compliance 6.4, equal 0.21 mg/L six-month average, 27 lbs/day six-month average, and 0.63 mg/L monthly average unless:

- As part of the application for the next reissuance, or prior to filing the application, the permittee submits either: a watershed adaptive management plan and a completed Watershed Adaptive Management Request Form 3200-139, an application for water quality trading, an application for a variance, or new information or additional data that supports a recalculation of the numeric limitation; and
- The Department modifies, revokes and reissues, or reissues the permit to incorporate a revised limitation before the expiration of the compliance schedule. (Note: The Department will prioritize reissuances and revocations, modifications, and reissuances of permits to allow permittees the opportunity to implement adaptive management or nutrient trading in a timely and effective manner.)

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3.2.5.6 Waste Load Allocation Requirements

Each year during the months of May through October the total daily discharge of BOD₅ from Outfalls 001, 002 and 008 is limited to a maximum of 12,437 lbs/day and the following wasteload allocated water quality related effluent limitations.

Definitions:

- Flow in the following waste load allocation tables shall be defined as the daily average flow value derived from continuous river flow monitoring data for the Wisconsin River collected at the Biron Dam. If such flow data is unavailable for any day, the daily average flow value shall be derived from continuous river flow monitoring data for the Wisconsin River collected at the Centralia Dam. Daily average flow values reported by the Wisconsin Valley Improvement Company for the Biron Dam and Centralia Dam locations are acceptable.
- Temperature in the following waste load allocation tables shall be defined as the daily average temperature value derived from continuous river temperature monitoring data for the Wisconsin River collected at the Wisconsin Rapids Dam. If such temperature data is unavailable for any day, the daily average temperature value shall be derived from continuous river temperature monitoring data for the Wisconsin River collected at the Biron Dam. Daily average temperature values reported by the Wisconsin Valley Improvement Company for the Wisconsin Rapids Dam and Biron Dam locations are acceptable.
- Point source allocation values (pounds per day BOD₅) in the following waste load allocation tables represent water quality related effluent limitations. The flow and temperature conditions used to determine a point source allocation value for a given day shall be the representative measurements of the flow and temperature of the previous day.

Determination of Effluent Limitations: For the purposes of determining compliance with the wasteload allocated water quality related effluent limitations, the following conditions shall be met:

- The sum of the actual daily discharges of BOD₅ for any 5-consecutive-day period shall not exceed the sum of the daily point source allocation values for the same 5-consecutive-day period.
- For any one-day period, the actual discharge of BOD₅ shall not exceed 120.5% of the point source allocation value for that day.

Monitoring Requirements: Flow and temperature monitoring of the Wisconsin River and flow and BOD₅ monitoring at Sampling Point 002 (Wastewater Reclamation Center effluent) shall be performed on the same schedule. For example, Wisconsin Valley Improvement Company provides flow and temperature data for the 24-hour period beginning at 7:00 a.m. each day. If the permittee uses Wisconsin Valley Improvement Company's river flow and temperature data, the permittee must begin collecting 24-hour composite samples for BOD₅ at 7:00 a.m. each day and must total effluent flow over the 24-hour period beginning and ending at 7:00 a.m. This requirement does not preclude the definition of point source allocation value, which requires the previous day's river temperature and flow to be used to derive the day's point source allocation value.

Reporting Requirements: During the months of May through October inclusive, the permittee shall report the following:

- Daily river flow (cfs);
- Daily river temperature (°F);
- Daily point source allocation value (lbs BOD₅ per day);
- Daily adjusted point source allocation values (percent adjustment factor multiplied by the point source allocation value) (lbs BOD₅ per day);
- Actual daily discharge value of BOD₅ (lbs BOD₅ per day);
- Number of times that the actual daily discharge value of BOD₅ exceeds the daily adjusted point source waste load allocation value;

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- Sum of the actual daily discharge values of BOD₅ (lbs BOD₅) for each 5-consecutive-day period (present day's discharge plus the four previous day's discharge);
- Sum of the daily point source waste load allocation values (lbs BOD₅) for each 5-consecutive-day period (present day's discharge plus the four previous day's discharge); and
- Number of times that the sum of actual daily discharge values of BOD₅ exceeds the sum of daily point source waste load allocation values.

Point Source Allocation Values: Point source allocation values are provided in the following tables:

3.2.5.6.1 Point Source Waste Load Allocated Values for **May and June** (lbs BOD₅ per day)

Temperature (previous day average in °F)	Flow at Biron Dam (previous day average in cfs)									
	0 TO 999	1000 TO 1199	1200 TO 1499	1500 TO 1999	2000 TO 2499	2500 TO 2999	3000 TO 3999	4000 TO 4999	5000 TO 5999	6000 OR MORE
≥82	6882	8213	10594	14765	20173	26242	27164	52819	60746	60746
78 TO 81	6882	8558	11176	15810	22076	28938	29703	59820	60746	60746
74 TO 77	6882	8888	11802	17028	24127	32034	32912	60746	60746	60746
70 TO 73	6882	9504	12709	18482	26695	36220	37231	60746	60746	60746
66 TO 69	7113	11146	14908	21760	31739	43359	44423	60746	60746	60746
62 TO 65	8691	13601	18216	26912	38543	54407	55846	60746	60746	60746
58 TO 61	11062	17338	23387	34746	51735	60746	60746	60746	60746	60746
54 TO 57	14784	23358	31882	47031	60746	60746	60746	60746	60746	60746
50 TO 53	20799	33479	46208	60746	60746	60746	60746	60746	60746	60746
46 TO 49	31137	50537	60746	60746	60746	60746	60746	60746	60746	60746
42 TO 45	48935	60746	60746	60746	60746	60746	60746	60746	60746	60746
≤41	60746	60746	60746	60746	60746	60746	60746	60746	60746	60746

3.2.5.6.2 Point Source Waste Load Allocated Values for **July and August** (lbs BOD₅/day)

Temperature (previous day average in °F)	Previous Day Average Flow at Biron Dam (cfs)									
	0 TO 999	1000 TO 1199	1200 TO 1499	1500 TO 1999	2000 TO 2499	2500 TO 2999	3000 TO 3999	4000 TO 4999	5000 TO 5999	6000 OR MORE
≥82	6882	8882	6882	8622	12354	16821	17353	36974	51094	58671
78 TO 81	6882	8882	6882	10086	14789	20360	21036	45547	60746	60746
74 TO 77	6882	8882	7848	11787	17575	24383	25009	55866	60746	60746
70 TO 73	6882	8882	8972	13725	20881	28894	28801	60746	60746	60746
66 TO 69	6882	8242	11386	17294	26035	36353	37374	60746	60746	60746
62 TO 65	6882	10786	14849	22564	33957	47584	48979	60746	60746	60746
≤81	8928	14582	20074	30624	46154	60746	60746	60746	60746	60746

3.2.5.6.3 Point Source Waste Load Allocated Values for **September and October** (lbs BOD₅/day)

Temperature (previous day average in °F)	Flow at Biron Dam (previous day average in cfs)									
	0 TO 999	1000 TO 1199	1200 TO 1499	1500 TO 1999	2000 TO 2499	2500 TO 2999	3000 TO 3999	4000 TO 4999	5000 TO 5999	6000 OR MORE
≥82	6882	6882	6882	6882	7404	10776	11205	25680	36097	41643
78 TO 81	6882	6882	6882	6882	8347	13601	14075	33030	46893	54362
74 TO 77	6882	6882	6882	7074	11634	17023	17585	42654	58873	60746
70 TO 73	6882	6882	6882	8947	14572	21243	21834	53041	60746	60746
66 TO 69	6882	6882	7370	12280	19527	28145	29047	60746	60746	60746
62 TO 65	6882	7044	10466	17003	26740	38291	39286	60746	60746	60746
58 TO 61	6882	10293	15016	24117	37855	53795	55393	60746	60746	60746
54 TO 57	8587	15401	22234	35382	55146	60746	60746	60746	60746	60746
50 TO 53	13532	23885	34381	54683	60746	60746	60746	60746	60746	60746
46 TO 49	21958	38463	55176	60746	60746	60746	60746	60746	60746	60746
42 TO 45	37364	60746	60746	60746	60746	60746	60746	60746	60746	60746
≤41	60746	60746	60746	60746	60746	60746	60746	60746	60746	60746

4 Land Treatment Requirements

4.1 Sampling Point

The discharge shall be limited to the waste type designated for the listed sampling point.

Sampling Point Designation	
Sampling Point No.	Sampling Point Location, Waste Description and Treatment Description (as applicable)
005	At Sampling Point 005, supernatant from the Nepco Lake alum sludge settling basin, which is located in SW 1/4, SW 1/4, Section 31, T22N, R6E, Town of Grand Rapids, Wood County, shall be sampled prior to seeping to groundwaters via Outfall 005.

4.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

4.2.1 Sampling Point (Outfall) 005 - NEPCO LAKE ALUM SLUDGE BASIN,

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit Units	Sample Frequency	Sample Type	Notes
pH Field		s.u.	Once	Grab	Sample during 2015
COD, Filtered		mg/L	Once	Grab	Sample during 2015
Aluminum Dissolved		mg/L	Once	Grab	Sample during 2015
Copper Dissolved		µg/L	Once	Grab	Sample during 2015
Lead Dissolved		µg/L	Once	Grab	Sample during 2015
Manganese Dissolved		mg/L	Quarterly	Grab	
Zinc Dissolved		µg/L	Once	Grab	Sample during 2015

5 Land Application Requirements

5.1 Sampling Point

The discharge shall be limited to land application of the waste type designated for the listed sampling point on Department approved land spreading sites or by hauling to another facility.

Sampling Point Designation	
Sampling Point No.	Sampling Point Location, Waste Type and Sample Contents(as applicable)
010	At Sampling Point 010, sludge from the Wastewater Reclamation Center shall be sampled prior to land application via Outfall 010.

5.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

5.2.1 Sampling Point (Outfall) 010 - WRC SLUDGE

Parameter	Limit Units	Sample Frequency	Sample Type	Notes
Solids, Total	Percent	Quarterly	Grab	
Nitrogen, Total Kjeldahl, Dry Wt.	Percent	Quarterly	Grab	
Nitrogen, Ammonia (NH ₃ -N) Total, Dry Wt.	Percent	Quarterly	Grab	
Nitrogen, Nitrite + Nitrate Total, Dry Wt.	Percent	Once	Grab	Sample during 2015
pH Field	s.u.	Annual	Grab	
Phosphorus, Dry Wt.	Percent	Annual	Grab	
Potassium, Dry Wt.	Percent	Annual	Grab	
Chloride, Dry Wt.	Percent	Once	Grab	Sample during 2015
Fluoride, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Sulfate, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Aluminum, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Arsenic, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Barium, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Boron, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Cadmium, Dry Wt.	mg/kg	Annual	Grab	
Calcium, Dry Wt.	mg/kg	Once	Grab	Sample during 2015

Parameter	Limit and Units	Sample Frequency	Sample Type	Notes
Chromium, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Copper, Dry Wt.	mg/kg	Annual	Grab	
Iron, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Lead, Dry Wt.	mg/kg	Annual	Grab	
Magnesium, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Manganese, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Mercury, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Molybdenum, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Nickel, Dry Wt.	mg/kg	Annual	Grab	
Sodium, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Strontium, Dry Wt.	mg/kg	Once	Grab	Sample during 2015
Zinc, Dry Wt.	mg/kg	Annual	Grab	
PCBs, Total, Dry Wt.	mg/kg	Once	Calculate	Sample during 2015
Dioxins and Furans, Dry Wt. (all seventeen 2,3,7,8-substituted polychlorinated congeners)	ng/kg	Annual	Grab Comp	See 5.3.3.1 for list of dioxin and furan congeners
Priority Pollutant Scan, Dry Wt. (as specified in ch. NR 215.03 (1) through (6), Wis. Adm. Code, but excluding asbestos)	mg/kg µg/kg	Once	Grab	Sample during 2015

5.2.1.1 Dry Weight Basis

All sludge results shall be reported on a dry weight basis.

5.2.1.2 Test Methods

For those parameters not listed in Table EM of ch. NR 219, Wis. Adm. Code, the permittee may use SW-846 methods as listed in Tables B, C, and D of ch. NR 219. The permittee may use EPA Method 7780 for strontium. The permittee may also use any other test method that is approved by the Department prior to use.

5.2.1.3 Sample Type for Dioxin, Furan and Congeners

The permittee may use a composite of daily sludge samples that are obtained over a period of one to five days when monitoring for dioxins and furans.

5.3 Sludge Application Rate Limitations

The permittee shall comply with the following sludge application rate limitations. Additional land application rate limitations and reporting requirements are provided in the Standard Requirements section of this permit.

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- Dioxin TEQ for sludge and soil profile shall be calculated as follows:

$$\text{Dioxin toxic equivalence or dioxin TEQ in ng/kg} = \sum C_x \times \text{TEF}_x$$

Where: C_x = Concentration of congener "x" in units of ng/kg. When a congener is not detected, a zero may be used in the above equation for the concentration of the congener.

TEF_x = Toxicity equivalency factor for congener "x" as provided in the following table.

5.3.3.1 Toxicity Equivalency Factors (TEFs)

Dioxin Congener	TEF	Furan Congener	TEF
2,3,7,8-TCDD	1	2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDD	1	1,2,3,7,8-PeCDF	0.03
1,2,3,4,7,8-HxCDD	0.1	2,3,4,7,8-PeCDF	0.3
1,2,3,6,7,8-HxCDD	0.1	1,2,3,4,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDD	0.1	1,2,3,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDD	0.01	1,2,3,7,8,9-HxCDF	0.1
OCDD	0.0003	2,3,4,6,7,8-HxCDF	0.1
		1,2,3,4,6,7,8-HpCDF	0.01
		1,2,3,4,7,8,9-HpCDF	0.01
		OCDF	0.0003

5.4 Soil Monitoring Requirements

The permittee shall comply with the following monitoring requirements for land application sites.

5.4.1 Soil Monitoring Requirements

Prior to the application of Wastewater Reclamation Center sludge on an agricultural site, the permittee shall predict the resulting cumulative load of total dioxin equivalents (TDE) at the site. As part of the prediction the permittee shall assume all total dioxin equivalents from previous applications of Wastewater Reclamation Center sludge are still present in the soil profile unless soil from the application site has been tested for 2,3,7,8-TCDD and 2,3,7,8-TCDF. If the soil from the application site was tested for 2,3,7,8-TCDD and 2,3,7,8-TCDF prior to application of Wastewater Reclamation Center sludge, the soil test results, and any Wastewater Reclamation Center sludge applications subsequent to the soil test, must be used in the prediction of resulting of TDE loads.

If the predicted cumulative total dioxin equivalents load exceeds **0.8 ng/kg in the soil profile**, or **0.35 ng/kg in the soil profile** for sites where livestock will graze, the permittee shall either use another application site or, prior to application of Wastewater Reclamation Center sludge, test the application site for the seventeen 2,3,7,8-substituted dioxin and furan congeners listed in table 5.3.3.1 and use the soil test results to predict the cumulative TDE load that will result from application of the sludge.

5.4.2 Background Testing for Dioxins and Furans

Once during 2014, the permittee shall collect a composite sample of soil from a land application site upon which no Wastewater Reclamation Center sludge has been applied. The permittee shall test the composite soil sample for the seventeen 2,3,7,8-substituted polychlorinated congeners listed in table 5.3.3.1.

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5.3.1 Nitrogen Requirements

The total pounds of nitrogen applied per acre per year shall be limited to the nitrogen needs of the cover crop minus any other nitrogen added to the land application site, including fertilizer or manure. Nitrogen applied can be calculated on the basis of plant available nitrogen, as long as the release of nitrogen from the organic material is credited to future years. Nitrogen applied may be based on information provided by the landowner or operator with respect to alternate sources of nitrogen. If plant available nitrogen is not taken into consideration, the application of total Kjeldahl nitrogen (TKN) shall not exceed 200 pounds per acre per year on agricultural lands spreading sites or 100 pounds per acre per year on silvicultural lands spreading sites unless the permittee demonstrates via the management plan that more can be applied and obtains written concurrence from the Department.

5.3.2 Total Dioxin Equivalents Limitations

- Total dioxin equivalents shall not exceed 1.2 ppt in the soil profile after application and incorporation of Wastewater Reclamation Center sludge on agricultural sites. The soil profile shall include the sludge plus underlying litter and soil to a depth of 15 centimeters below the litter-soil interface.
- Sludge may be applied on sites where livestock will graze only if the resulting soil concentration does not exceed 0.5 ppt total dioxin equivalents. The soil profile shall include the sludge plus underlying litter and soil to a depth of 2 centimeters below the litter soil interface if livestock graze on the site before the sludge is incorporated or 15 centimeters below the litter soil interface if livestock graze on the site after the sludge is incorporated.
- Total dioxin equivalents for sludge applied to agricultural sites and sites where livestock will graze, in the soil and in the mix of sludge and soil, shall be calculated as follows:

$$\text{TDE (ng/kg)} = [2,3,7,8\text{-TCDD (ng/kg)}] + 0.1 \times [2,3,7,8\text{-TCDF (ng/kg)}]$$

Where: TDE = Total Dioxin Equivalents
 $[2,3,7,8\text{-TCDD (ng/kg)}]$ = concentration of 2,3,7,8-TCDD in units of ng/kg dry weight basis.
 $[2,3,7,8\text{-TCDF (ng/kg)}]$ = concentration of 2,3,7,8-TCDF in units of ng/kg dry weight basis.

- Total dioxin equivalents shall not exceed 0.53 milligrams per acre after application of Wastewater Reclamation Center sludge on silvicultural sites. Total dioxin equivalents for silvicultural sites shall be calculated as follows:

$$\text{TDE (ng/kg)} = [2,3,7,8\text{-TCDD (ng/kg)}] + 0.0013 \times [2,3,7,8\text{-TCDF (ng/kg)}]$$

Where: TDE = Total Dioxin Equivalents
 $[2,3,7,8\text{-TCDD (ng/kg)}]$ = concentration of 2,3,7,8-TCDD in units of ng/kg dry weight basis.
 $[2,3,7,8\text{-TCDF (ng/kg)}]$ = concentration of 2,3,7,8-TCDF in units of ng/kg dry weight basis.

5.3.3 Dioxin Toxic Equivalence Alternative Limitations

If the cumulative TDE load predicted for an agricultural application site or a site where livestock will graze as specified below in section 5.4.1 exceeds TDE limits specified above in section 5.3.2, the permittee shall not apply any more Wastewater Reclamation Center sludge to the site unless the following alternative dioxin toxic equivalence limits are met.

- When the dioxin toxic equivalence (dioxin TEQ) of Wastewater Reclamation Center sludge is less than 1.2 ng/kg, the permittee may apply the sludge to agricultural sites with greater than 1.2 ng/kg dioxin TEQ in the soil profile if the permittee demonstrates that application of the sludge lowers the dioxin TEQ in the soil profile.
- When the dioxin TEQ of the permittee's sludge is less than 0.5 ng/kg, the permittee may apply sludge to sites where livestock will graze that exceed 0.5 ng/kg dioxin TEQ in the soil profile if the permittee demonstrates that application of the sludge lowers the dioxin TEQ in the soil profile.

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5.5 Application Site Restriction

- Sludge that contains greater than 10 ng/kg total dioxin equivalents (TDE) shall not be applied within the range of Prairie Chickens (*Tympanuchus cupido*), or any other threatened or endangered wildlife species, unless the sludge is incorporated into the soil within 21 days of application.
- Sludge shall not be applied within 1,200 feet of a public water supply when the sludge contains detectable concentrations of either 2,3,7,8-TCDD or 2,3,7,8-TCDF.

5.6 Reporting Requirements

The permittee shall comply with the following reporting requirements.

5.6.1 Daily Log

Land application activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under "Records Retention" in the Standard Requirements section, and if requested, made available to the Department. At minimum, the log sheets shall include the following:

5.6.1.1 Minimum Content of Daily Log Sheets

Parameters	Units	Sample Frequency	Sample Type
DNR Site Number(s)	Number	Daily	Log
Acres Applied	Acres	Daily	Log
Application Rate	Tons/Acre/Day	Daily	Calculated

5.6.2 Annual Reporting (Form 3400-55)

The annual totals for the land application loadings of sludge to field spreading sites shall be submitted electronically on the Annual Land Application Report Form 3400-55 by **January 31** each year whether or not waste is land applied. Following submittal of the electronic Annual Land Application Report Form 3400-55, this form shall be certified electronically via the "eReport Certify" page by a principal executive officer or duly authorized representative. The "eReport Certify" page certifies that the electronic report form is true, accurate and complete.

5.6.2.1 Land Application Loadings Information Reported Annually

Parameters	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	Number	Annual	-
Facility Site No./Field No.	Number	Annual	-
Landowner	-	Annual	-
Acres Land Applied	Acres	Annual	Total Annual
Total Amount Per Site	Tons (DWB)	Annual	Total Annual

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Total Kjeldahl Nitrogen per Site	Pounds/Acre/Year	Annual	Calculated
Amount of Nitrogen from Other Sources	Pounds/Acre/Year	Annual	Total Annual
Crop Code and Year	Code	Annual	-
Nitrogen Recommendation	Pounds/Acre/Year	Annual	Total Annual

5.6.3 Total Dioxin Equivalents Loadings Reporting

By **February 15th** of each year, the permittee shall report cumulative total dioxin equivalents loadings in the soil profile for each land application site that received Wastewater Reclamation Center sludge during the previous year (ng TDE per kg soil or ppt on a dry weight basis). When soil monitoring results are available, the permittee shall use the results in the calculation of cumulative TDE loadings or in place of a calculated loading if the soil testing was performed after sludge applied. Soil monitoring results should be included in the report also.

5.6.4 Soil Monitoring Results Reporting

The results of soil testing for the seventeen 2,3,7,8-substituted polychlorinated dioxin and furan congeners as required by section 5.4.2 above shall be reported by **March 31, 2015**.

5.7 Sludge Management Plan

The permittee's application program and all land applications sites used for Wastewater Reclamation Center sludge shall be operated in accordance with a Department approved management plan.

6 Schedules of Compliance

6.1 BMP Implementation and Reporting Compliance Schedule

The permittee shall submit BMP reporting dates as specified by section 2.3.7, Monitoring, Corrective Action, and Reporting Requirements in accordance with the following schedule.

Required Action	Date Due
Submit First Annual BMP Report: Submit the first annual report on daily BMP monitoring.	2/15/2013
Submit Second Annual BMP Report: Submit the second annual report on daily BMP monitoring.	2/15/2014
Submit Third Annual BMP Report: Submit the third annual report on daily BMP monitoring.	2/15/2015
Submit Fourth Annual BMP Report: Submit the fourth annual report on daily BMP monitoring.	2/15/2016
Submit Fifth Annual BMP Report: Submit the fifth annual report on daily BMP monitoring.	2/15/2017

6.2 Outfall 006 Total Residual Chlorine

The permittee shall comply with the effluent limit for total residual chlorine imposed by table 3.2.3 of this permit for Outfall 006 (No. 6 Turbine condenser, chlorine dioxide plant chiller and other noncontact cooling water sources) in accordance with the following schedule.

Required Action	Date Due
Action Plan Submittal: Submit an action plan for complying with total residual chlorine effluent limits imposed at Outfall 006. If construction is required, include plans and specifications with the submittal.	9/30/2013
Initiate Actions: Initiate actions identified in the plan for complying with total residual chlorine limits imposed at Outfall 006.	12/31/2013
Submit Progress Report: Submit a report on the progress made to complete actions necessary to achieve compliance with total residual chlorine effluent limits imposed at Outfall 006.	9/30/2014
Complete Actions: Complete actions necessary to achieve compliance with total residual chlorine effluent limits imposed at Outfall 006.	6/30/2015

6.3 Outfall 011 Total Residual Chlorine

The permittee shall comply with the effluent limit for total residual chlorine imposed by table 3.2.4 of this permit for Outfall 011 (intake water standpipe overflow), in accordance with the following schedule.

Required Action	Date Due
Action Plan Submittal: Submit an action plan for complying with total residual chlorine effluent limits imposed at Outfall 011. If construction is required, include plans and specifications with the submittal.	9/30/2013

Required Action	Date Due
Initiate Actions: Initiate actions identified in the plan for complying with total residual chlorine limits imposed at Outfall 011.	12/31/2013
Submit Progress Report: Submit a report on the progress made to complete actions necessary to achieve compliance with total residual chlorine effluent limits imposed at Outfall 011.	9/30/2014
Complete Actions: Complete actions necessary to achieve compliance with total residual chlorine effluent limits imposed at Outfall 011.	6/30/2015

6.4 WQBELs for Total Phosphorus

The permittee shall comply with the water quality based effluent limits (WQBELs) for total phosphorus as specified in footnote 3.2.5.4 in accordance with the following schedule.

Required Action	Date Due
Operational Evaluation Report: The permittee shall prepare and submit to the Department for approval an operational evaluation report. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor facility modifications that will optimize reductions in phosphorus discharges from the treatment plant during the period prior to complying with final phosphorus WQBELs and, where possible, enable compliance with final phosphorus WQBELs by January 1, 2016 . The report shall provide a plan and schedule for implementation of the measures, improvements, and modifications. Implementation of the measures, improvements, and modifications should be as quickly as possible, but not later than January 1, 2016 . The report shall state whether the measures, improvements, and modifications will enable compliance with final phosphorus WQBELs. Regardless of whether they are expected to result in compliance, the permittee shall implement the measures, improvements, and modifications in accordance with the plan and schedule specified in the operational evaluation report.	12/31/2013
If the operational evaluation report concludes that the facility can achieve final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements, and minor facility modifications, the permittee shall comply with the final phosphorus WQBEL by January 1, 2016 and is not required to comply with the milestones identified below for years 3 through 7 of this compliance schedule ('Preliminary Compliance Alternatives Plan', 'Final Compliance Alternatives Plan', 'Treatment Plant Upgrade to Meet WQBELs', 'Final Plans and Specifications', 'Complete Construction', and 'Achieve Compliance').	
Study of Feasible Alternatives: If the Operational Evaluation Report concludes that the permittee cannot achieve final phosphorus WQBELs with source reduction measures, operational improvements and other minor facility modifications, the permittee shall initiate a study of feasible alternatives for meeting final phosphorus WQBELs and comply with the remaining required actions of this schedule of compliance. If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements, and minor facility modifications, the Department may reopen and modify the permit to include an implementation schedule for achieving the final phosphorus WQBELs sooner than January 1, 2020 .	12/31/2013

Required Action	Date Due
Compliance Alternatives, Source Reduction, Improvements and Modifications Status Report: The permittee shall submit a 'Compliance Alternatives, Source Reduction, Operational Improvements and Minor Facility Modification' status report to the Department. The report shall provide an update on the permittee's: (1) progress implementing source reduction measures, operational improvements, and minor facility modifications to optimize reductions in phosphorus discharges and, to the extent that such measures, improvements, and modifications will not enable compliance with the WQBELs, (2) status evaluating feasible alternatives for meeting phosphorus WQBELs.	12/31/2014
Preliminary Compliance Alternatives Plan: The permittee shall submit a preliminary compliance alternatives plan to the Department. If the plan concludes upgrading of the permittee's wastewater treatment facility is necessary to achieve final phosphorus WQBELs, the submittal shall include a preliminary engineering design report. If the plan concludes Adaptive Management will be used, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 without the Adaptive Management Plan. If water quality trading will be undertaken, the plan must state that trading will be pursued. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	12/31/2015
Final Compliance Alternatives Plan: The permittee shall submit a final compliance alternatives plan to the Department. If the plan concludes upgrading of the permittee's wastewater treatment facility is necessary to meet final phosphorus WQBELs, the submittal shall include a final engineering design report addressing the treatment plant upgrades, and a facility plan if required pursuant to ch. NR 110, Wis. Adm. Code. If the plan concludes Adaptive Management will be implemented, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 and an engineering report addressing any treatment system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code. If the plan concludes water quality trading will be used, the submittal shall identify potential trading partners. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	12/31/2016
Progress Report on Plans & Specifications: Submit progress report regarding the progress of preparing final plans and specifications. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	9/30/2017
Final Plans and Specifications: Unless the permit has been modified, revoked and reissued, or reissued to include Adaptive Management or Water Quality Trading measures or to include a revised schedule based on factors in s. NR 217.17, the permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Stats., specifying treatment plant upgrades that must be constructed to achieve compliance with final phosphorus WQBELs, and a schedule for completing construction of the upgrades by the complete construction date specified below. Permit modification, revocation and reissuance, and reissuance are subject to s. 283.53(2) Stats. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	3/30/2018
Treatment Plant Upgrade to Meet WQBELs: The permittee shall initiate construction of the upgrades. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41, Stats. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	6/30/2018

Required Action	Date Due
Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	6/30/2019
Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	12/31/2019
Achieve Compliance: The permittee shall achieve compliance with final phosphorus WQBELs. (Note: See section 6.4.2, 'Alternative Approaches to Phosphorus WQBEL Compliance'.)	1/1/2020

6.4.1 Reporting Requirements

No later than 30 days following each compliance date in the above schedule, the permittee shall notify the department in writing of its compliance or noncompliance with the required action. If a submittal is required, a timely submittal fulfills the notification requirement.

6.4.2 Alternative Approaches to Phosphorus WQBEL Compliance

Rather than upgrading its wastewater treatment facility to comply with WQBELs for total phosphorus, the permittee may use Water Quality Trading or the Watershed Adaptive Management Option, to achieve compliance under ch. NR 217, Wis. Adm. Code, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. A permittee may also implement a upgrade to its wastewater treatment facility in combination with Water Quality Trading or the Watershed Adaptive Management Option to achieve compliance, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. If the Final Compliance Alternatives Plan concludes that a variance will be pursued, the Plan shall provide information regarding the basis for the variance.

The permittee shall submit the permit application for the next reissuance at least 6 months prior to expiration of this permit. If the permittee intends to pursue adaptive management to achieve compliance with the phosphorus water quality based effluent limitation, the permittee shall submit with the application for the next reissuance: a completed Watershed Adaptive Management Request Form 3200-139, the completed Adaptive Management Plan and final plans for any system upgrades necessary to meet interim limits pursuant to s. NR 217.18. If the permittee intends to pursue pollutant trading to achieve compliance, the permittee shall submit an application for water quality trading with the application for the next reissuance. If system upgrades will be used in combination with pollutant trading to achieve compliance with the final water quality-based limit, the reissued permit will specify a schedule for the necessary upgrades. If the permittee intends to seek a variance, the permittee shall submit an application for a variance with the application for the next reissuance.

6.5 Mercury Pollutant Minimization Program

The permittee shall implement or continue to implement a pollutant minimization program as defined in s. NR 106.145(2), Wis. Adm. Code, in accordance with the following schedule.

Required Action	Date Due
Implement Mercury Pollutant Minimization Program: The permittee shall implement the PMP as submitted on February 3, 2012 and approved by the Department for the Wastewater Reclamation Center and Nekoosa mill.	3/31/2013

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Required Action	Date Due
Submit First Annual Status Report Submittal: The permittee shall submit to the Department an annual status report on the progress of the PMP as required by s. NR 106.145(7), Wis. Adm. Code. Annual status reports for the Wastewater Reclamation Center and Nekoosa mill may be combined into a single annual status report.	3/31/2014
Submit Second Annual Status Report Submittal: The permittee shall submit to the Department an annual status report on the progress of the PMP as required by s. NR 106.145(7), Wis. Adm. Code. Annual status reports for the Wastewater Reclamation Center and Nekoosa mill may be combined into a single annual status report.	3/31/2015
Submit Third Annual Status Report Submittal: The permittee shall submit to the Department an annual status report on the progress of the PMP as required by s. NR 106.145(7), Wis. Adm. Code. Annual status reports for the Wastewater Reclamation Center and Nekoosa mill may be combined into a single annual status report.	3/31/2016
Submit Fourth Annual Status Report Submittal: The permittee shall submit to the Department an annual status report on the progress of the PMP as required by s. NR 106.145(7), Wis. Adm. Code. Annual status reports for the Wastewater Reclamation Center and Nekoosa mill may be combined into a single annual status report.	3/31/2017

6.6 Total Dioxin Equivalents Cumulative Loadings Report

By February 15th each year, the permittee shall report the cumulative loading of total dioxin equivalents (TDE) for each site that received Wastewater Reclamation Center sludge during the previous calendar year as required by footnote 3.6.3, Total Dioxin Equivalents Loadings Reporting, and consistent with the following schedule.

Required Action	Date Due
Submit First Annual TDE Loadings Report: Report the cumulative loading of total dioxin equivalents in the soil for each land application site that received Wastewater Reclamation Center sludge during 2012.	2/15/2013
Submit Second Annual TDE Loadings Report: Report the cumulative loading of total dioxin equivalents in the soil for each land application site that received Wastewater Reclamation Center sludge during 2013.	2/15/2014
Submit Third Annual TDE Loadings Report: Report the cumulative loading of total dioxin equivalents in the soil for each land application site that received Wastewater Reclamation Center sludge during 2014.	2/15/2015
Submit Fourth Annual TDE Loadings Report: Report the cumulative loading of total dioxin equivalents in the soil for each land application site that received Wastewater Reclamation Center sludge during 2015.	2/15/2016
Submit Fifth Annual TDE Loadings Report: Report the cumulative loading of total dioxin equivalents in the soil for each land application site that received Wastewater Reclamation Center sludge during 2016.	2/15/2017

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6.7 Soil Monitoring Results Reporting

The permittee shall report the results of soil testing for the seventeen 2,3,7,8-substituted polychlorinated dioxin and furan congeners as required by section 5.4.2 in accordance with the following schedule.

Required Action	Date Due
Soil Monitoring Results Reporting: The permittee shall report the results of soil testing for the seventeen 2,3,7,8-substituted polychlorinated dioxin and furan congeners as required by section 5.4.2.	3/31/2015

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7 Standard Requirements

NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers): The conditions in ss. NR 205.07(1) and NR 205.07(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(3).

7.1 Reporting and Monitoring Requirements

7.1.1 Monitoring Reports

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically via the 'eReport Certify' page by a principal executive officer, a ranking elected official or other duly authorized representative. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

7.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

7.1.3 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

7.1.4 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.

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- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD₅ and Total Suspended Solids shall be considered to be limits of quantitation.
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a 0 (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

7.1.5 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 5 years from the date of the sample, measurement, report or application, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

7.1.6 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

7.2 System Operating Requirements

7.2.1 Noncompliance Notification

- The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance;
 - any noncompliance which may endanger health or the environment;
 - any violation of an effluent limitation resulting from an unanticipated bypass;
 - any violation of an effluent limitation resulting from an upset; and
 - any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit.
- A written report describing the noncompliance shall also be submitted to the Department's regional office within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.
- The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

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7.2.4 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. The wastewater treatment facility shall be under the direct supervision of a state certified operator as required in s. NR 108.06(2), Wis. Adm. Code. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

7.2.5 Spill Reporting

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

7.2.6 Planned Changes

In accordance with ss. 283.31(4)(b) and 283.59, Stats., the permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

7.2.7 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

7.3 Surface Water Requirements

7.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantitation (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

7.3.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average limits and mass limits:

- **Weekly/Monthly/Six-Month/Annual Average Concentration** = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-

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NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources immediately of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.

7.2.2 Unscheduled Bypassing

Any unscheduled bypass or overflow of wastewater at the treatment works or from the collection system is prohibited, and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats., unless all of the following occur:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.
- The permittee notifies the department of the unscheduled bypass or overflow. The permittee shall notify the department within 24 hours of initiation of the bypass or overflow occurrence by telephone, voicemail, fax or e-mail. Within 5 days of conclusion of the bypass or overflow occurrence, the permittee shall submit to the department in writing, all of the following information:
 - Reason the bypass or overflow occurred, or explanation of other contributing circumstances that resulted in the overflow event. If the overflow or bypass is associated with wet weather, provide data on the amount and duration of the rainfall or snow melt for each separate event.
 - Date the bypass or overflow occurred.
 - Location where the bypass or overflow occurred.
 - Duration of the bypass or overflow and estimated wastewater volume discharged.
 - Steps taken or the proposed corrective action planned to prevent similar future occurrences.
 - Any other information the permittee believes is relevant.

7.2.3 Scheduled Bypassing

Any construction or normal maintenance which results in a bypass of wastewater is prohibited unless authorized by the Department in writing. If the Department determines that there is significant public interest in the proposed action, the Department may schedule a public hearing or notice a proposal to approve the bypass. Each request shall specify the following minimum information:

- Proposed date of bypass.
- Estimated duration of the bypass.
- Alternatives to bypassing.
- Measures to mitigate environmental harm caused by the bypass.
- Estimated volume of the bypass.

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month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

- **Weekly Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.
- **Monthly Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.
- **Six-Month Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

7.3.3 Visible Foam or Floating Solids

There shall be no discharge of floating solids or visible foam in other than trace amounts.

7.3.1 Total Residual Chlorine Requirements (When De-Chlorinating Effluent)

Test methods for total residual chlorine, approved in ch. NR 219 - Table B, Wis. Adm. Code, normally achieve a limit of detection of about 20 to 50 micrograms per liter and a limit of quantitation of about 100 micrograms per liter. When de-chlorinating effluent, reporting of test results and compliance with effluent limitations for chlorine residual and total residual halogens shall be as follows:

- Sample results which show no detectable levels are in compliance with the limit. These test results shall be reported on Wastewater Discharge Monitoring Report Forms as "<100 µg/L". (Note: 0.1 mg/L converts to 100 µg/L)
- Samples showing detectable traces of chlorine are in compliance if measured at less than 100 µg/L, unless there is a consistent pattern of detectable values in this range. These values shall also be reported on Wastewater Discharge Monitoring Report Forms as "<100 µg/L." The facility operating staff shall record actual readings on logs maintained at the plant, shall take action to determine the reliability of detected results (such as re-sampling and/or calculating dosages), and shall adjust the chemical feed system if necessary to reduce the chances of detects.
- Samples showing detectable levels greater than 100 µg/L shall be considered as exceedances, and shall be reported as measured.
- To calculate average or mass discharge values, a "0" (zero) may be substituted for any test result less than 100 µg/L. Calculated values shall then be compared directly to the average or mass limitations to determine compliance.

7.3.2 Compliance with Technology Based Phosphorus Limitation

Compliance with the technology based concentration limitation for phosphorus shall be determined as a rolling twelve-month average and shall be calculated as follows:

First, determine the pounds of phosphorus for an individual month by multiplying the average of all the concentration values for phosphorus (in mg/L) for that month by the total flow for the month in Million Gallons times the conversion factor of 8.34.

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Then, the monthly pounds of phosphorus determined in this manner shall be summed for the most recent 12 months and inserted into the numerator of the following equation.

$$\text{Average concentration of P in mg/L} = \frac{\text{Total lbs of P discharged (most recent 12 months)}}{\text{Total flow in MG (most recent 12 months)} \times 8.34}$$

The compliance calculation shall be performed each month with a reported discharge volume after substituting data from the most recent month(s) for the oldest month(s). A calculated value in excess of the concentration limitation will be considered equivalent to a violation of a monthly average.

7.3.3 Additives

In the event that the permittee wishes to commence use of a water treatment additive, or increase the usage of the additives greater than indicated in the permit application, the permittee must get a written approval from the Department prior to initiating such changes. This written approval shall provide authority to utilize the additives at the specific rates until the permit can be either reissued or modified in accordance with s. 283.53, Stats. Restrictions on the use of the additives may be included in the authorization letter.

7.3.4 Whole Effluent Toxicity (WET) Monitoring Requirements

In order to determine the potential impact of the discharge on aquatic organisms, static-renewal toxicity tests shall be performed on the effluent in accordance with the procedures specified in the "State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition" (PUB-WT-797, November 2004) as required by NR 219.04, Table A, Wis. Adm. Code). All of the WET tests required in this permit, including any required retests, shall be conducted on the *Ceriodaphnia dubia* and fathead minnow species. Receiving water samples shall not be collected from any point in contact with the permittee's mixing zone and every attempt shall be made to avoid contact with any other discharge's mixing zone.

7.3.5 Whole Effluent Toxicity (WET) Identification and Reduction

Within 60 days of a retest which showed positive results, the permittee shall submit a written report to the Biomonitoring Coordinator, Bureau of Watershed Management, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, which details the following:

- A description of actions the permittee has taken or will take to remove toxicity and to prevent the recurrence of toxicity;
- A description of toxicity reduction evaluation (TRE) investigations that have been or will be done to identify potential sources of toxicity, including some or all of the following actions:
 - Evaluate the performance of the treatment system to identify deficiencies contributing to effluent toxicity (e.g., operational problems, chemical additives, incomplete treatment)
 - Identify the compound(s) causing toxicity
 - Trace the compound(s) causing toxicity to their sources (e.g., industrial, commercial, domestic)
 - Evaluate, select, and implement methods or technologies to control effluent toxicity (e.g., in-plant or pretreatment controls, source reduction or removal)
- Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented;
- If no actions have been taken, the reason for not taking action.

The permittee may also request approval from the Department to postpone additional retests in order to investigate the source(s) of toxicity. Postponed retests must be completed after toxicity is believed to have been removed.

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7.4.3 Monitoring and Calculating PCB Concentrations in Sludge

When sludge analysis for "PCB, Total Dry Wt" is required by this permit, the PCB concentration in the sludge shall be determined as follows.

Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code.

- EPA Method 1668 may be used to test for all PCB congeners. If this method is employed, all PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection and the limit of quantitation shall be used when calculating the total value of all congeners. All results shall be added together and the total PCB concentration by dry weight reported. Note: It is recognized that a number of the congeners will co-elute with others, so there will not be 209 results to sum.
- EPA Method 8082A shall be used for PCB-Aroclor analysis and may be used for congener specific analysis as well. If congener specific analysis is performed using Method 8082A, the list of congeners tested shall include at least congener numbers 5, 18, 31, 44, 52, 66, 87, 101, 110, 138, 141, 151, 153, 170, 180, 183, 187, and 206 plus any other additional congeners which might be reasonably expected to occur in the particular sample. For either type of analysis, the sample shall be extracted using the Soxhlet extraction (EPA Method 3540C) (or the Soxhlet Dean-Stark modification) or the pressurized fluid extraction (EPA Method 3545A). If Aroclor analysis is performed using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.11 mg/kg as possible. Reporting protocol, consistent with s. NR 106.07(6)(e), should be as follows: If all Aroclors are less than the LOD, then the Total PCB Dry Wt result should be reported as less than the highest LOD. If a single Aroclor is detected then that is what should be reported for the Total PCB result. If multiple Aroclors are detected, they should be summed and reported as Total PCBs. If congener specific analysis is done using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.003 mg/kg as possible for each congener. If the aforementioned limits of detection cannot be achieved after using the appropriate clean up techniques, a reporting limit that is achievable for the Aroclors or each congener for the sample shall be determined. This reporting limit shall be reported and qualified indicating the presence of interference. The lab conducting the analysis shall perform as many of the following methods as necessary to remove interference:

3620C - Florisil	3611B - Alumina
3640A - Gel Permeation	3660B - Sulfur Clean Up (using copper shot instead of powder)
3630C - Silica Gel	3665A - Sulfuric Acid Clean Up

7.4.4 Other Methods of Disposal or Distribution Report

The permittee shall submit electronically the Other Methods of Disposal or Distribution Report Form 3400-52 by January 31 each year whether or not waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit. Following submittal of the electronic Report Form 3400-52, this form shall be certified electronically via the "eReport Certify" page by a principal executive officer or duly authorized representative. The "eReport Certify" page certifies that the electronic report form is true, accurate and complete.

7.4.5 Land Application Site Approval

The permittee is authorized to landspread permitted liquid wastes, by-product solids and sludges on sites approved in writing by the Department in accordance with ss. NR 214.17(2) and 214.18(2), Wis. Adm. Code. Any site use restrictions or granting of case-by-case exceptions shall be identified in the approval letter. If the permittee wishes to have approval for additional sites, application shall be made using Land Application Site Request Form 3400-53. Complete information shall be submitted about each site, including location maps and soil maps, any soil analyses results and other information showing that the site complies with all application requirements and permit conditions. Spreading on a site may commence upon receipt of Department approval. If an existing spreading site

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7.3.6 Upset

Definition: "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the conditions listed below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

Conditions necessary for demonstration of upset: A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- An upset occurred and that the permittee can identify the cause(s) of the upset;
- The permitted facility was at the time being properly operated;
- The permittee submitted notice of the upset as required in the "Noncompliance Notification" Standard Requirement; and
- The permittee complied with any remedial measures required under the "Noncompliance Notification" Standard Requirement.

Burden of proof: In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

7.4 Land Application Requirements

7.4.1 General Sludge Management Information

The General Sludge Management Form 3400-48 shall be completed and submitted prior to any significant sludge management changes.

7.4.2 Land Application Characteristic Report

The analytical results from testing sludges that are land applied shall be reported annually on the Characteristic Report Form 3400-49. The Characteristic Report Form 3400-49 shall be submitted electronically no later than the date indicated on the form. Following submittal of the electronic Characteristic Report Form 3400-49, this form shall be certified electronically via the "eReport Certify" page by a principal executive officer or duly authorized representative. The "eReport Certify" page certifies that the electronic report form is true, accurate and complete.

The permittee shall use the following convention when reporting sludge monitoring results: Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 1.0 mg/kg, report the pollutant concentration as < 1.0 mg/kg.

All sludge results shall be reported on a dry weight basis.

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is found by the Department to be environmentally unacceptable, a written notice will be issued to withdraw approval of that site.

7.4.6 Operating Requirements/Management Plan

All land application sites used for sludges shall be operated in accordance with a Department approved management plan. The management plan shall be consistent with the requirements of this permit, ss. NR 214.18 (3) and (6), Wis. Adm. Code. If operational changes are needed, the land application management plan shall be amended by submitting a written request to the Department for approval.

7.4.7 Soil Incorporation Requirements

After land application, sludge shall be incorporated into the soil. The timing of such incorporation and other related requirements and procedures shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

7.4.8 Field Stockpiles

The permittee is encouraged to landspread sludges as they are transported to the fields; but if it becomes necessary to stockpile solids in the fields, the stockpiles shall be spread within 72 hours or as specified in the approved management plan.

7.4.9 Additional Requirements from ch. NR 214, Wis. Adm. Code

The requirements of s. NR 214.18 (4)(b), and (d) through (h) [application, nutrient, pH, metals, and PCB limitations] for sludge spreading systems are included by reference in this permit. The permittee shall comply with these requirements.

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8 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
BMP Implementation and Reporting Compliance Schedule – Submit First Annual BMP Report	2/15/2013	27
Total Dioxin Equivalents Cumulative Loadings Report – Submit First Annual TDE Loadings Report	2/15/2013	31
Mercury Pollutant Minimization Program – Implement Mercury Pollutant Minimization Program	3/31/2013	30
Outfall 006 Total Residual Chlorine – Action Plan Submittal	9/30/2013	27
Outfall 011 Total Residual Chlorine – Action Plan Submittal	9/30/2013	27
Outfall 006 Total Residual Chlorine – Initiate Actions	12/31/2013	27
Outfall 011 Total Residual Chlorine – Initiate Actions	12/31/2013	27
WQBELs for Total Phosphorus – Operational Evaluation Report	12/31/2013	28
WQBELs for Total Phosphorus – Study of Feasible Alternatives	12/31/2013	28
BMP Implementation and Reporting Compliance Schedule – Submit Second Annual BMP Report	2/15/2014	27
Total Dioxin Equivalents Cumulative Loadings Report – Submit Second Annual TDE Loadings Report	2/15/2014	31
Mercury Pollutant Minimization Program – Submit First Annual Status Report	3/31/2014	30
Outfall 006 Total Residual Chlorine – Submit Progress Report	9/30/2014	27
Outfall 011 Total Residual Chlorine – Submit Progress Report	9/30/2014	27
WQBELs for Total Phosphorus – Compliance Alternatives, Source Reduction, Improvements and Modifications Status Report	12/31/2014	28
BMP Implementation and Reporting Compliance Schedule – Submit Third Annual BMP Report	2/15/2015	27
Total Dioxin Equivalents Cumulative Loadings Report – Submit Third Annual TDE Loadings Report	2/15/2015	31
Mercury Pollutant Minimization Program – Submit Second Annual Status Report	3/31/2015	30
Soil Monitoring Results Reporting – Soil Monitoring Results Reporting	3/31/2015	32
Outfall 006 Total Residual Chlorine – Complete Actions	6/30/2015	27
Outfall 011 Total Residual Chlorine – Complete Actions	6/30/2015	27
WQBELs for Total Phosphorus – Preliminary Compliance Alternatives Plan	12/31/2015	28

Description	Date	Page
BMP Implementation and Reporting Compliance Schedule – Submit Fourth Annual BMP Report	2/15/2016	27
Total Dioxin Equivalents Cumulative Loadings Report – Submit Fourth Annual TDE Loadings Report	2/15/2016	31
Mercury Pollutant Minimization Program – Submit Third Annual Status Report	3/31/2016	30
WQBELs for Total Phosphorus – Final Compliance Alternatives Plan	12/31/2016	28
BMP Implementation and Reporting Compliance Schedule – Submit Fifth Annual BMP Report	2/15/2017	27
Total Dioxin Equivalents Cumulative Loadings Report – Submit Fifth Annual TDE Loadings Report	2/15/2017	31
Mercury Pollutant Minimization Program – Submit Fourth Annual Status Report	3/31/2017	30
WQBELs for Total Phosphorus – Progress Report on Plans & Specifications	9/30/2017	28
Submit Annual Land Treatment Report Forms 3400-48, 3400-52 and 3400-55	by January 31st of each year for the previous calendar year	25, 39 and 40
Wastewater Discharge Monitoring Reports and Land Application Characteristic Report Form 3400-49	no later than the date indicated on the form	33 and 39

Report forms shall be submitted to the address printed on the report form. Any facility plans or plans and specifications for industrial wastewater systems shall be submitted to the Bureau of Watershed Management, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to: West Central Region, 1300 W. Clairemont Ave., P.O. Box 4001, Eau Claire, WI 54702-4001 and copied to Department of Natural Resources, Wastewater Section, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921.